



# Hazard Mitigation Planning Committee

## Meeting #1

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**Date:** 27 November 2023  
1:00 p.m. – 2:30 p.m. PST

**Meeting at:** Microsoft Teams Meeting (see meeting information in the calendar invite)

**Project:** County of El Dorado Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) Update  
Hazard Mitigation Planning Committee (HMPC) Meeting #1

**Present:**

Adam Brown	Georgetown Divide Public Utility District
Angela Johnson	Cameron Estates Community Services District
Bill Sugiyama	El Dorado County Emergency Services Authority
Bret Sampson	County of El Dorado
Carol S. Heape, MSW, CMC	Elder Options Inc.
Chris Perry	County of El Dorado
Dan Bolster	El Dorado County Transportation Commission
Daniel Newsom	El Dorado Irrigation District (EID)
Dave Johnston	El Dorado County Air Quality Management District
Elizabeth Pope	Placer Independent Resource Services
Jerry Barton	El Dorado County Transportation Commission
Jim Drennan	South Lake Tahoe Fire
Jody Bailey	Mother Lode Rehabilitation Enterprise Inc.
Joy Reggiardo	Cameron Estates CSD
Kelli Nuttall	Mother Lode Rehabilitation Enterprise Inc.
Kim Gustafson	Grizzly Flats Community Services District
Kimberly Lusby	El Dorado County Animal Services
Makenzie Gold	Food Bank of El Dorado County
Marianne Agudo	Garden Valley Ranch Estates Community Services District
Michael Grassle	Cameron Park Community Services District
Michael Lilienthal	El Dorado Hills Fire Department and El Dorado Sheriff's Office of Emergency Services
Mike Summersille	Marshall Medical Center
Philip Jones	El Dorado County Office of Education
Scott Bare	El Dorado County Sheriff's Office of Emergency Services
Susie Davies	Mother Lode Rehabilitation Enterprise Inc.
Tom Meyer	El Dorado County Office of Wildfire Preparedness and Resilience

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Troy Morton  
Veronica Hancock

El Dorado County Sheriff's Office of Emergency Services  
Mother Lode Rehabilitation Enterprise Inc.

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## **Agenda Topics**

### **1. Introductions**

Ms. Juliana Prosperi initiated the meeting with a self-introduction, followed by introductions from the WSP consulting team members, Ms. Melissa Baum and Mr. Josh Schnitzlein. Scott Bare, established as the primary contact for the County, then introduced himself followed by self-introductions by Troy Morton and Michael Lilienthal. Ms. Prosperi proceeded to introduce Slido, a feedback tool employed by WSP to engage participants in virtual meetings.

### **2. Hazard Mitigation and the Disaster Mitigation Act**

Ms. Prosperi introduced the concept of hazard mitigation by explaining the escalating disaster costs in the United States. Taxpayers bear the burden when disaster strike, with FEMA spending over \$59 billion annually on disaster recovery. Mitigation planning, defined as sustained action to reduce long-term risk, emerges as a cost-effective investment, returning six dollars for every dollar spent.

Ms. Prosperi explained that hazard mitigation, a key aspect of emergency management, focuses on minimizing natural hazards, breaking the cycle of high costs. The regulatory context, mandated by the Disaster Mitigation Act (DMA), requires regular updates of Hazard Mitigation Plans (HMPs) for eligibility in federal disaster funding. Adopting the Local Hazard Mitigation Plan (LHMP) into the Safety Element ensures eligibility for state funding through the California Disaster Assistance Act.

### **3. Planning Process**

Ms. Baum briefly overviewed FEMA's four phase mitigation planning process, then further discussed the details of each phase, starting with Phase 1: Organize Resources.

#### **Phase 1: Organize Resources**

- Determine Planning Area
- Build the Planning Team
- Establish the Hazard Mitigation Planning Team
- Create an Outreach Strategy
- Review Community Capabilities
- Obtain Community Commitment to Mitigation



Ms. Baum asked the group, "What other opportunities do you recommend for increased outreach and public engagement?" The following were suggested as potential outreach and engagement opportunities:

- Although the community likes town halls and in-person meetings, those events often have low turnout. Utilizing online surveys and social media posts may prove more effective in reaching a broader audience, including those not actively engaged in the planning process.
- To promote ongoing awareness of the planning process, it needs to be pushed through social media.
- Advertising in local free publications has proven to be the most successful method for informing the public about opportunities, otherwise, a large percentage of the population may remain unaware of the planning process.
- Setting up a table at local community farmers markets or events provides an additional avenue for engagement.
- In our experience some of the rural folks are hard to reach, due to limited broadband services in some area. Our best route has been at local community hubs.
- There is an Earth Day event at the Library in April that is another good option.
- Establish contact with local business and agencies who work with individuals one-on-one.
- Most of the El Dorado County communities maintain a local Facebook page which several read.

Ms. Baum additionally asked the group, "What other Stakeholders should be included in the planning process?" The following were suggested by the HMPC as potential stakeholders:

- Cameron Estates Community Services District (CSD) clarified that they were a separate entity from the Cameron Park CSD.
- Food Bank of El Dorado County
- El Dorado County Transportation Commission and El Dorado Transit
- El Dorado County Amateur Radio Club (ARES)
- All assisted living facilities & skilled nursing facilities throughout the County
- Housing and Urban Development (HUD) housing throughout the County
- Mobile home parks throughout the County
- Office of Wildfire Preparedness and Resiliency (OWPR), either as County Staff or Stakeholder. OWPR staff can also serve as the liaison between the County and Fire Safe Council(s).
- Pacific Gas & Electric (PG&E) and Sacramento Municipal Utility District (SMUD)

## **Phase 2: Conduct a Risk Assessment**

- Identify and describe hazards
- Identify assets
- Assess risk
- Summarize vulnerability



Ms. Baum asked the group, “What recent studies or reports have been prepared by your agency or organization that can help identify and/or quantify your local hazards?” The following were suggested by HMPC members:

- A new flood map of Cameron Park is currently being drafted by the consulting firm Stantec with assistance from the El Dorado Water Authority (EDWA) and the Department of Transportation. The first draft is expected in March or April.
- The Marshall Medical Center aims to complete an annual Hazards Vulnerability Assessment (HVA)
- Marshall Medical Center is also currently working on their NPC-5 survivability requirements.
- The County has a Community Wildfire Protection Plan (CWPP), but we're in the process of selecting a consultant to prepare a comprehensive update to the CWPP. Anticipated completion date is end of 2024.
- There is also a Tahoe Basin CWPP update and this plan is nearing completion.
- The Georgetown Divide Public Utilities District (GDPUD) has completed a vulnerability assessment, along with some other studies.
- err NPC-5

Ms. Baum then asked the group “What other significant hazard events have occurred in the past 5 years?” The following events were noted by HMPC participants:

- Extreme flooding in burn scar areas and along the abundance of waterways Countywide
- Winter storms of 2021/2022

### **Phase 3: Develop a Mitigation Strategy**

- Review & update plan goals & objectives
- Review mitigation alternatives
- Draft an action plan

### **Phase 4: Plan Implementation & Maintenance**

Keep the Plan Current

- Plan maintenance procedures
- Continue public involvement

Review and Adopt the Plan

- HMPC & Local Planning Team (LPT) Review
- Local government adoption
- Public Review
- State and FEMA Plan Review

Create a Safe and Resilient Community

- Implementing the plan to achieve mitigation goals
- Securing funding and assistance



#### **4. Role of the Hazard Mitigation Planning Committee**

Mr. Schnitzlein provided a comprehensive overview of the roles and responsibilities within the Hazard Mitigation Planning Committee (HMPC), Local Planning Teams (LPTs), El Dorado County, and the WSP team. He highlighted upcoming HMPC meetings, emphasizing the distribution of the Plan Update Guide and public survey by the HMPC, the County, and other planning team members. Mr. Schnitzlein further stressed the necessity for attendance at all planning meetings and workshops, provision of relevant data, completion of the plan update guide, and distribution of public outreach materials. Formal coordination with plan adoption was emphasized as a crucial aspect of participation. Mr. Schnitzlein concluded this segment by briefly addressing the various levels of stakeholder participation.

#### **5. Review of Identified Hazards**

Mr. Schnitzlein showed a list of recent hazard events in El Dorado County. He then asked participants, "Which hazards do you think are the highest priority for El Dorado County?" Following are the responses, in order of the highest number of votes to lowest,

- Wildfire
- Severe Weather (Winter Storms/Heavy Snow)
- Drought and Water Supply Challenges
- Flooding
- Severe Winter Weather (Thunderstorms/Hail/Lightning/High Winds/Tornado)
- Landslide/Debris Flow
- Extreme Heat
- Public Health Hazards (Pandemic, Epidemic, Communicable Diseases)
- Avalanche
- Agricultural/Forestry Disease and Tree Mortality
- Dam Failure

#### **6. Coordination with Related Planning Efforts & Recent Studies**

Mr. Schnitzlein reiterated the various planning guidance and documents that will lay the groundwork for the County's MJHMP development, including the latest FEMA planning guidance that will be effective starting from 2023. He talked about the GIS data needs list, noting that the WSP team will compile a robust critical facility database as well as carry out hazard exposure analysis on critical facilities and assessor's parcels. He also discussed the Plan Update Guide, noting that the WSP team will be using the Plan Update Guides filled out by the HMPC and stakeholders to gather information on hazards and existing capabilities.

#### **7. Planning for Public and Stakeholder Involvement**

Ms. Prosperi outlined the strategies for public and stakeholder engagement. Specifically, she highlighted that the WSP team would distribute the public survey to the County, HMPC, and



stakeholders. Ms. Prosperi detailed the diverse methods available to the County and related jurisdictions to gather input on the planning process. This includes discussions about the MJHMP at County Planning Commission and Board of Supervisor meetings. To illustrate, she showcased the County's MJHMP webpage, a central hub where upcoming press releases, draft plans, and other pertinent documents related to the planning process will be posted, offering the public an accessible platform for review. Mr. Barre noted that his team will be updating the Cal OES webpage so that the MJHMP update has its own page for information and updates.

## **8. Information Needs and Next Steps**

Ms. Prosperi concluded the presentation portion of the meeting by highlighting next steps for her team, El Dorado County and the participating jurisdictions, and the stakeholders. These next steps are detailed below.

### **WSP**

- Plan Update Guide will be distributed this week
- Starting GIS data collection
- Development of a Critical Facility Database
- Developing public outreach materials

### **El Dorado County and Municipalities**

- Complete Plan Update Guide due by **December 27, 2023**.
- Post a Press Release announcing effort to update County's MJHMP
- Attend HMPC Meeting #2 (tentatively scheduled for late December/early January)
- Circulate and Complete Online Survey by **February 1, 2024**.

### **Stakeholders**

- Provide additional information as applicable – hazards, plans, projects
- Stay in loop via email group from El Dorado County, HMPC, and City LPTs

Ms. Prosperi also discussed the project schedule, which is shown below.

Meeting adjourned at 2:35 p.m.

# Schedule

Phase/Task	Oct.	November	December	January	February	March	April
<b>Phase 1: Organize Resources</b>							
Project Kickoff	█	█	█				
Define and Organize Planning Team		█					
Public Involvement		█	█	█	█		
Coordinate with Other Agencies		█	█	█	█		
HMPC Meeting #1				█			
Public Workshop #1				█			
<b>Phase 2: Identify Hazards and Assess Risk</b>							
Data Collection and Plan Review			█	█	█	█	
Assess Community Capabilities				█	█		
Identify Hazards				█	█	█	
Assess Vulnerability					█	█	█
HMPC Meeting # 2					█		
<b>Phase 3: Develop a Mitigation Strategy</b>							
Update Goals				█	█		
Mitigation Action Plan Update				█	█		
HMPC Meeting #3					█		
Develop New Mitigation Actions				█	█		
<b>Task 4: Implement and Monitor the Plan</b>							
Draft Plan				█	█	█	
Administrative Draft MJHMP				█	█		
Public Review Draft				█			
45-Day Public Review				█	█	█	█
Public Workshop #2						█	
Incorporate Public Comments into Final MJHMP						█	
Cal OES 45-Day Review						█	█
FEMA 45-Day Review							█
MJHMP Local Adoptions							█
Official FEMA MJHMP Approval and Grant Closeout							█

WSP Environment & Infrastructure, Inc.  
 10940 White Rock Road, Suite 190  
 Rancho Cordova, CA 95670

wsp.com

(916) 636-3200

Welcome to the  
El Dorado County  
MJHMP Kickoff!

Please Type Your Name,  
Title, and Affiliation in Chat  
Box





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El Dorado County  
Multi-Jurisdictional Hazard  
Mitigation Plan Update

Hazard Mitigation Planning  
Committee Meeting #1  
November 27, 2023 - 1:00 – 2:30 pm



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## Meeting Agenda

1. Introductions
2. Hazard Mitigation and the Disaster Mitigation Act
3. Planning Process
4. Role of the Hazard Mitigation Planning Committee
5. Review of Identified Hazards
6. Coordination with Related Planning Efforts & Recent Studies
7. Planning for Public and Stakeholder Involvement
8. Information Needs and Next Steps



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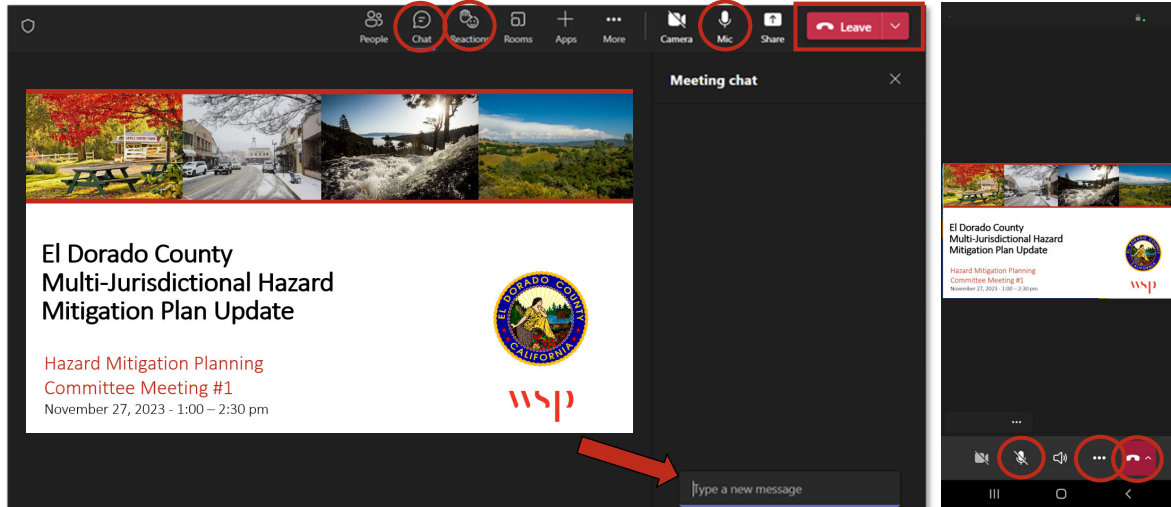
## Meeting Logistics

- Please mute your mic when not speaking.
- ...but please feel free to unmute when you have something to say!
- You can also use the chat log to make comments, ask questions, or provide information.
- Slides, meeting summary, and recording will be made available.
- Meeting will use Slido polls to get feedback from participants.
  - Join at **slido.com #EIDoradoHMP**



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# Teams Overview



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# Introductions



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# Introductions

## El Dorado County Sheriff's Office

- Scott Bare
- Greg Almos
- Moke Auwae
- Michael Lilienthal
- Troy Morton
- Leslie Schlag
- Jeff Whitlock
- County Emergency Management Coordinators
- Federal & State Partners
- Other Stakeholders



## WSP Environment & Infrastructure Project Team

- Juliana Prospero, AICP – Project Manager
- Jeff Brislawn, CFM – Hazard Mitigation Technical Lead
- Melissa Baum – Hazard Mitigation Planner
- Josh Schnitzlein – Senior Environmental Planner
- Mack Chambers – GIS Specialist
- Donna Valasek – GIS Specialist

Jurisdictional representatives & stakeholders  
**Type your name, title, and affiliation in chat box**



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Join at [slido.com](https://www.slido.com)  
#ElDoradoHMP

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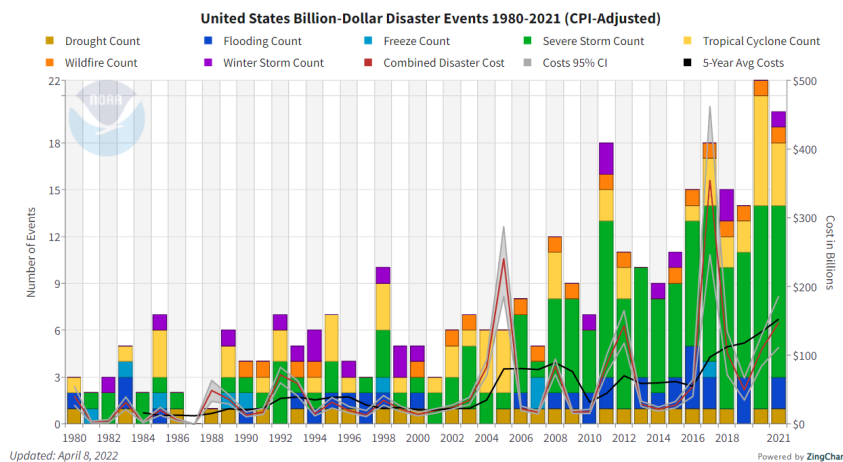
# Hazard Mitigation Planning and the Disaster Mitigation Act



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## Trends Resulting in Increased Disaster Costs

- Population & community growth
  - More people living in hazardous areas
  - Greater exposure to risk: people, infrastructure, buildings
- More hazard events
- More disaster declarations
- Increase in disaster response & recovery costs



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## Why Addressing These Trends is a Priority

- Legal and ethical responsibilities
- The increasing costs of response and recovery
  - The cost of 'doing nothing' is too high
- Many events are predictable and repetitive
- Loss reduction activities can be undertaken
  - They work well
  - Cost effective and environmentally sound
  - Funds are available to help



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## How Can We Reverse These Trends? Hazard Mitigation!

**Mitigation:** Any *sustained* action taken to reduce or eliminate long term risk to human life and property from hazards.



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# Disaster Mitigation Act of 2000

## Federal Legislation

### 44 CFR 201.6

- Requires communities to update their hazard mitigation plans every 5 years to remain eligible for federal pre- and post-disaster funding for hazard mitigation grants from FEMA
- Plan ensures the jurisdictions in the County will remain eligible for mitigation projects when funding becomes available



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# DMA Planning: What it is and Why it's Important

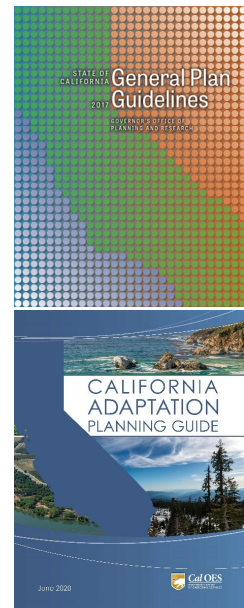
- Identify risks and solutions in a pre-disaster environment
- Creates eligibility for pre- and post-disaster mitigation funds
- Guide mitigation activities in coordinated and economic manner
- Incorporate into other existing planning mechanisms
  - General Plan Safety Element
  - Zoning Ordinance
- Consider impacts to future development: Plan and build wisely
- Reduce losses
- Make community more disaster resilient



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# California Legislative Requirements

<b>SB 552</b>	<ul style="list-style-type: none"> <li>Requires the County establish a standing drought task force to facilitate drought and water shortage preparedness for state small water systems, domestic wells, and other privately supplied homes within County. The County must develop a plan demonstrating the potential drought and water shortage risk and interim and long-term solutions for state small water systems and domestic wells (2021).</li> </ul>
<b>AB 747 AB 1409 SB 99</b>	<ul style="list-style-type: none"> <li>Requires the identification of evacuation routes and evaluation of their capacity, safety, and viability under a range of emergency scenarios. AB 1409 requires the identification of evacuation locations during emergencies. SB 99 requires the identification of residential developments in hazard areas that do not have at least two emergency evacuation routes (2019).</li> </ul>
<b>SB 1035</b>	<ul style="list-style-type: none"> <li>Addresses climate adaptation strategies in Safety Element and an update of climate data at least every 8 years (2018).</li> </ul>
<b>SB 379</b>	<ul style="list-style-type: none"> <li>Requires inclusion of climate vulnerability assessment and integration of adaptation strategies in the Safety Element and encourages climate change discussion in LHMP (2015).</li> </ul>
<b>SB 1000</b>	<ul style="list-style-type: none"> <li>Requires inclusion of environmental justice and equity goals and policies (climate equity) in the Safety Element if there are disadvantaged communities. These policies are proposed to reduce health risks, promote engagement, and address needs (2016).</li> </ul>
<b>SB 1241</b>	<ul style="list-style-type: none"> <li>Requires Safety Element to address wildfire risks in State Responsibility Areas and Very High Fire Hazard Severity Zones, develop policies to mitigate wildfire risk, and includes review by State Board of Forestry and Fire Protection (2012).</li> </ul>
<b>AB 2140</b>	<ul style="list-style-type: none"> <li>Links LHMPs and Safety Elements by encouraging the adoption of LHMPs into Safety Elements and by tying funding eligibility to approval of LHMPs (2006).</li> </ul>



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# Hazard Mitigation Plan Development

- Overview of Key Elements
- Convene Hazard Mitigation Planning Committee
- Create an updated plan per latest FEMA/DMA requirements
- Update the risk assessment to reflect current hazards, risk and vulnerability
- Obtain progress on mitigation actions from prior plans
- Develop new mitigation actions
- Document progress and note changes in priorities
- Create consistent eligibility for Hazard Mitigation Assistance grants



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# Planning Process Overview



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# Mitigation Planning Process



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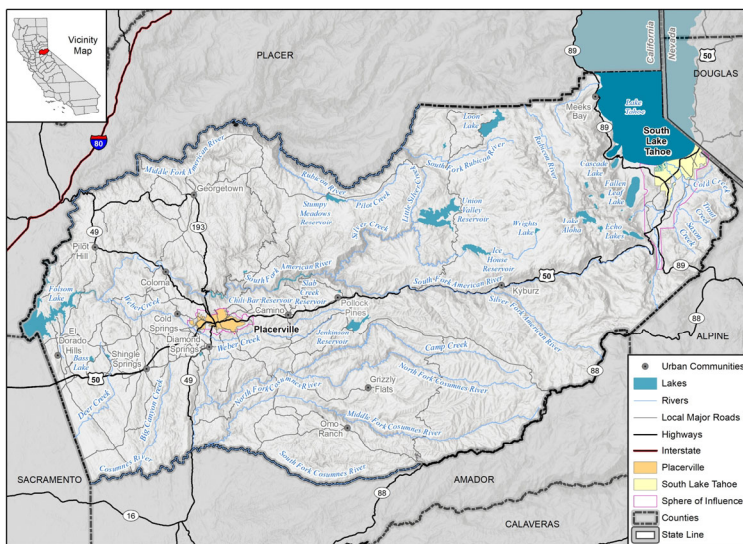


# Phase 1: Organize Resources

- Determine Planning Area
- Build the Planning Team
- Establish the Hazard Mitigation Planning Team
- Create an Outreach Strategy
- Review Community Capabilities
- Obtain Community Commitment to Mitigation

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## Determine the Planning Area and Resources



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# Create an Outreach Strategy

## Requirements:

- Two Opportunities for Public Involvement  
Initial: Before Plan Development  
Final: Review Draft Plan
- Include an opportunity for neighboring communities, local and regional agencies (that regulate development), businesses, academia, and other private and non-profit interests to be involved
- Continue public participation during plan maintenance
- Documenting stakeholder engagement and public input



## Options:

- Host public meetings or workshops
- Engage the Stakeholder agencies and organizations
- Post draft plan on websites and hardcopies in libraries
- Develop press releases
- Use questionnaires/surveys



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# Build a Planning Team

## • Participating Jurisdictions

- City of Placerville
- Georgetown Divide Public Utility District
- County Office of Education
- Cameron Park CSD

## • County Staff

- Sheriff's Office
- Environmental Management
- Emergency Medical Services Agency
- Agriculture Commission
- Planning and Building Department

## • Federal Agencies

- FEMA Region IX
- National Oceanic Atmospheric Administration/National Weather Service

## • State Agencies

- California Office of Emergency Services
- California Natural Resources Agency
- California Department of Fire Protection and Forestry

## - Other

- El Dorado County Water Agency
- Fire Safe Council



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# Stakeholders

- Alliance of Regional Collaboratives for Climate Adaptation (ARCCA)
- American River Conservancy
- Barton Hospital
- CAL FIRE
- California Tahoe Conservancy
- Camp Richardson Resort
- Clarksville Region Historical Society
- County Agencies
- County Resource Conservation Districts
- El Dorado Community Foundation
- El Dorado County Farm Trails Association
- El Dorado Hills Chamber of Commerce
- League to Save Lake Tahoe
- Local Religious Organizations
- Local Community Service Districts
- Local Fire Districts
- Local Public Utilities Districts
- Local Schools, Districts, and Colleges
- Major local employers
- Marshall Hospital and Medical Center
- Meyers Community Foundation
- Neighboring Counties
- New Morning Youth and Family Services
- NGOs and CBOs
- Shingle Springs Bank of Miwok Indians
- Sierra Climate Adaptation and Mitigation Partnership (Sierra CAMP)
- Sierra Nevada Alliance
- South Lake Tahoe Family Resource Center
- Tahoe Chamber of Commerce
- Tahoe Prosperity Center
- Tahoe Regional Planning Agency
- Tahoe Transportation District
- The Mountain Pact
- Valley Vision
- Washoe Tribe of Nevada and California
- Water Districts and Agencies

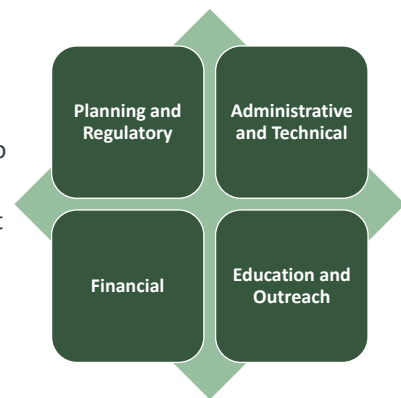


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# Review of Community Capabilities

## What's already in place related to hazard mitigation?

- Conduct an inventory of communities' existing and proposed policies, programs, and ordinances that may affect its vulnerability to hazards
- Determine the communities' technical & fiscal abilities to implement mitigation initiatives. Include ability to attract and leverage funding.
- Consider any special opportunities to enhance or supplement these capabilities.



Jurisdictional representatives & stakeholders  
**Complete the Plan Update Guide by December 27, 2023.**



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## Phase 2: Conduct a Risk Assessment

1. Identify and describe hazards
2. Identify assets
3. Assess risk
4. Summarize vulnerability



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## Hazard Identification

### Has it Happened Before?

- Information Sources:
  - Existing County and Tribal Mitigation Plans
  - Community Wildfire Protection Plans
  - State/Local/Tribal THIRAs
  - Past disaster declarations
  - Planning team/community members
  - Existing plans and reports
  - GIS-based maps and data
  - Internet websites and databases
  - Newspaper/historical records
  - Local, state, and federal experts



2022 Mosquito Fire



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## Previous History of Hazard Events

Name	Disaster #	Year	State Declaration	Federal Declaration	Location
Winter Storms	DR-1155	1997	Yes	No	El Dorado County
Hollow Fire	FM-2532	2004	Yes	No	El Dorado County
Winter Storms	DR-1628	2005-2006	Yes	Yes	El Dorado County
Spring Storms	DR-1646	2006	Yes	Yes	El Dorado County
Angora Fire	FM-2700	2007	Yes	Yes	Meyers, South Lake Tahoe
January Storms	2008-01	2008	Yes	No	El Dorado County
King Fire	FM-5081	2014	Yes	Yes	Pollock Pines/Camino
January 2017 Storms	DR-4301	2017	Yes	Yes	El Dorado County
Late January 2017 Storms	DR-4305	2017	Yes	Yes	El Dorado County
February 2017 Storms	DR-4308	2017	Yes	Yes	El Dorado County
Caldor Fire	DR-4619	2021	Yes	Yes	El Dorado County
Mosquito Fires	DR-5453	2022	Yes	Yes	El Dorado County
2023 Winter Storms	DR-4683	2023	Yes	Yes	El Dorado County



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What other significant hazard events have occurred in the past 5 years? (Note the jurisdiction(s) impacted)

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# Profile the Hazards

## Identify and Describe the Hazards

- Profile the hazards that are likely to have impacts and are reasonable to mitigate
  - Hazard/Problem Description
  - Geographic Area (maps of affected area where applicable)
  - Past Occurrences
  - Frequency/Likelihood of Future Occurrence
  - Magnitude (extent) /Secondary effects
  - Climate Change Considerations



2019 LHMP Hazards
Avalanche
Dam/Levee Failure
Drought/Extreme Heat/Tree Mortality
Earthquake and Debris Flow
Erosion
Floods
Seiche Wave
Severe Storms
Severe Thunderstorms and Tornadoes
Wildfire



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# Vulnerability Assessment

## Identify and Inventory Assets and Determine What Will be Affected

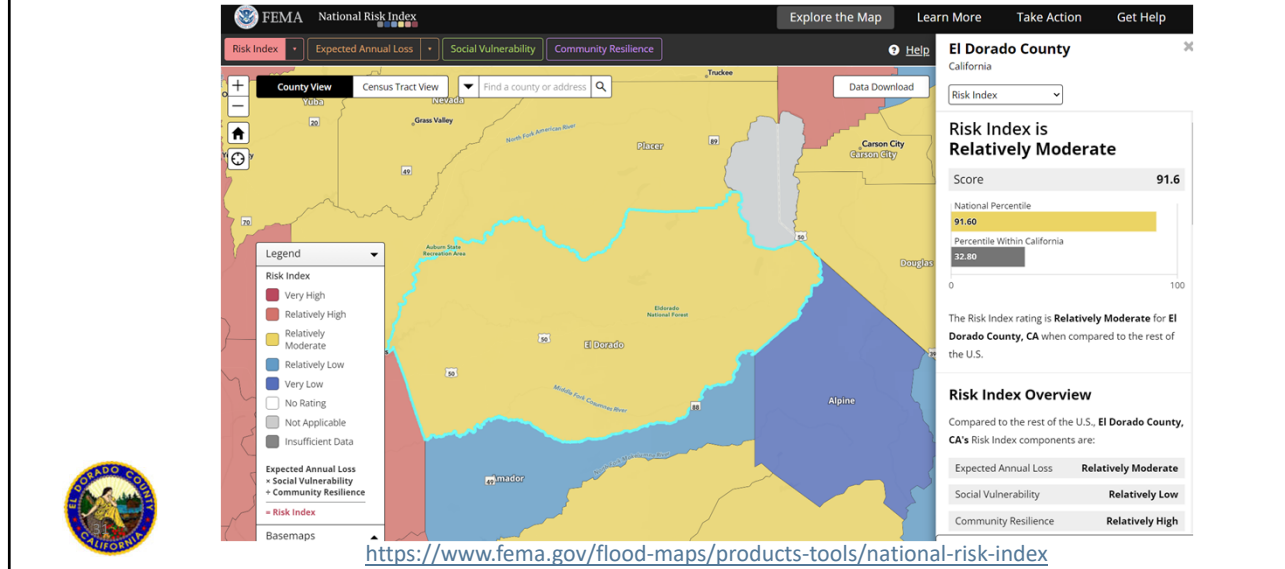
- Inventory residential & commercial structures
- Inventory critical facilities
- Determine # and value of structures
- Determine # of people in area
- Identify vulnerable infrastructure
- Identify development trends and constraints
- Identify cultural, natural & historic resource areas
- Estimate the losses



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# FEMA National Risk Index

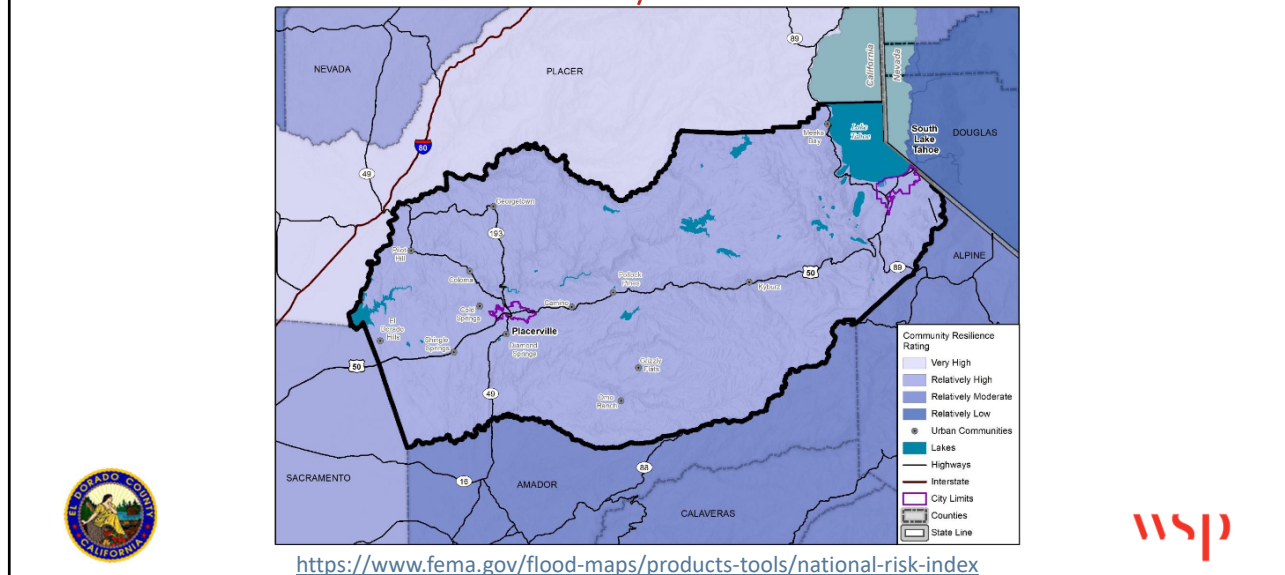
## Risk Index



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# FEMA National Risk Index

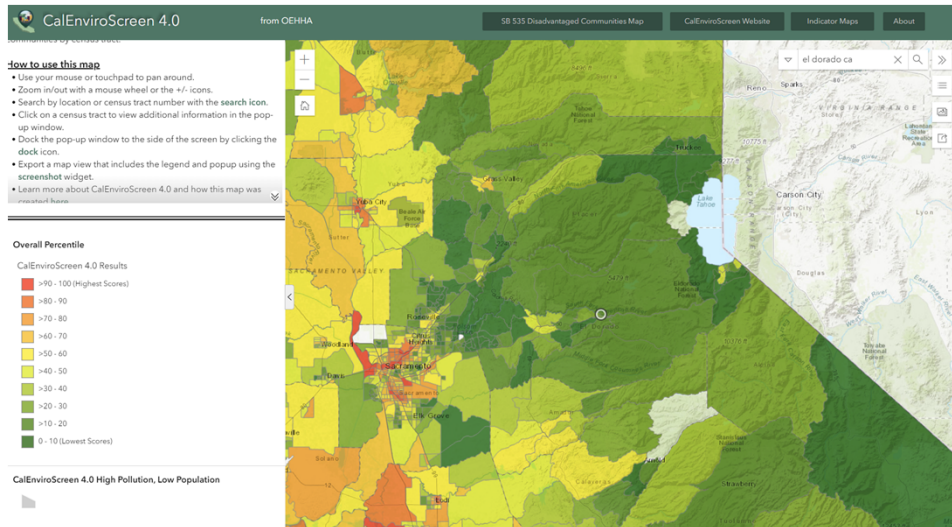
## Community Resilience



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# Social Vulnerability, Equity & Inclusion

## California Office of Environmental Health Hazard Assessment – CalEnviroScreen 4.0



[https://experience.arcgis.com/experience/11d2f52282a54cee6184203/page/CalEnviroScreen-4\\_0/](https://experience.arcgis.com/experience/11d2f52282a54cee6184203/page/CalEnviroScreen-4_0/)

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## Phase 3: Develop a Mitigation Strategy

- Review & update plan goals & objectives
- Review mitigation alternatives
- Draft an action plan



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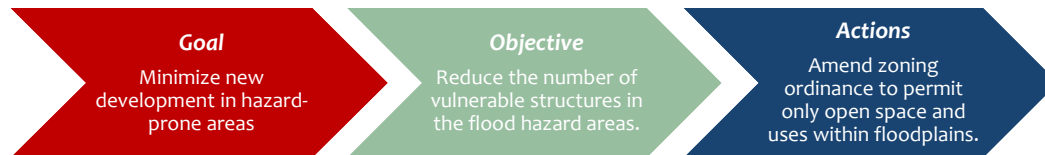
## Develop Mitigation Goals

### Should reflect the Risk Assessment

- Areas of high vulnerability
  - Estimated losses
  - At-risk existing facilities
  - At-risk critical facilities
  - At-risk cultural and natural resources
- Link with related goals from other existing plans
- Reduce Losses to Existing and Future development

### Considerations

Objectives (optional)



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## Mitigation Goals: 2019 El Dorado County LHMP

**Goal 1** – Minimize risk and vulnerability of El Dorado County to the impacts of natural hazards; protect lives, public health and safety; and, reduce damages and losses to property, economy, and the environment.

**Goal 2** – Provide protection for critical facilities, infrastructure, utilities and services from hazard impacts.

**Goal 3** – Improve public awareness, education, and preparedness for all hazards.

**Goal 4** – Increase communities' capabilities to mitigate losses and to be prepared for, respond to, and recover from a disaster event.

**Goal 5** – Maintain FEMA Eligibility/Position the communities for grant funding.



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## Categories of Mitigation Actions

- Plans and Regulations
- Structure and Infrastructure Projects
- Education and Awareness
- Natural Systems Protection

*Actions must be prioritized*



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## Update Status of Actions From Existing LHMP

- **Not Started:** Work has not begun
- **In Progress:** Work has begun but is not completed
- **Annual Implementation:** Ongoing with no specific end date
- **Completed:** The action has been finished
- **Deleted:** The action is no longer relevant or cancelled due to changing priorities, lack of funds, etc.

There is no requirement or expectation to have completed any/all previous actions.



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# Review & Prioritize Mitigation Actions

## STAPLEE Criteria

- **Social** - Does the measure treat people fairly (different groups, different generations)? Does it consider social equity, disadvantaged communities, or vulnerable populations?
- **Technical** - Will it work? (Does it solve the problem? Is it feasible?)
- **Administrative** - Is there capacity to implement and manage project?
- **Political** - Who are the stakeholders? Did they get to participate? Is there public support? Is political leadership willing to support it?
- **Legal** - Does your organization have the authority to implement? Is it legal? Are there liability implications?
- **Economic** - Is it cost-beneficial? Is there funding? Does it contribute to the local economy or economic development? Does it reduce direct property losses or indirect economic losses?
- **Environmental** - Does it comply with environmental regulations or have adverse environmental impacts?







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# Funding Sources: FEMA Mitigation Grants

## High Hazard Potential Dam (HHPD) Program

- Pre-Disaster
- Annual appropriation
- Used to repair, rehabilitate or remove high hazard dams
- Federally-owned dams are NOT eligible
- Local match varies

HMA Program Comparison	 HMGP Hazard Mitigation Grant Program	 HMGP Post Fire Hazard Mitigation Grant Program Post Fire	 BRIC Building Resilient Infrastructure and Communities	 FMA Flood Mitigation Assistance Program
Program type	Post-Disaster	Post-Disaster	Pre-Disaster	Pre-Disaster
Funding Availability	Presidentially declared disaster	FMAG declared disaster	6% set-aside from federal post-disaster grant funding	Annual appropriations
Competitive?	X	X	✓	✓
Eligible Applicants	States, federally-recognized tribes, territories, and DC	States, federally-recognized tribes, territories, and DC	States, federally-recognized tribes, territories, and DC	States, federally-recognized tribes, territories, and DC
Eligible Subapplicants	State agencies, local governments, tribes and PNP organizations	State agencies, local governments, tribes and PNP organizations	State agencies, local governments, and tribes	State agencies, local governments, and tribes
Hazard Mitigation Plan Requirement	✓	✓	✓	✓
NFIP Participation	Communities with projects in SFHAs	Communities with projects in SFHAs	Communities with projects in SFHAs	Subapplicants and properties



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## Wildfire Mitigation Projects Eligible for FEMA Funding

- Defensible Space
- Hazardous Fuels Reduction Activities
  - Community level vegetation management
  - Vegetation removal
  - Vegetation clearing and/or thinning
  - Slash removal
  - Vertical clearance of tree branches
- Structural Protection Through Ignition-Resistant Construction Activities



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## Flood Mitigation Projects Eligible For FEMA Funding

- Acquisition
- Dry and Wet Flood-proofing
- Elevation
- Minor Localized Flood Reduction Projects
  - Detention ponds
  - Channel stabilization
- Levee Projects if no duplication of programs with Army Corp
- Infrastructure Retrofit
  - Culverts, bridges, etc.



South Fork American River Flooding



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## Other Mitigation Projects Eligible For FEMA Funding

- Property Acquisition
- Landslide Channel/Slope Stabilization
- Utility Protection/ Infrastructure Retrofit
- Rehabilitation of High Hazard Potential Dams
- Safe Rooms
- Generator Installation
- Seismic Building/Infrastructure Retrofit
- Climate Resilience Activities
  - Groundwater Recharge
  - Green Infrastructure



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## Phase 4: Plan Implementation & Maintenance

### Keep the Plan Current

- Plan maintenance procedures
- Continue public involvement

### Review and Adopt the Plan

- HMPC & Local Planning Team (LPT) Review
- Public Review
- State and FEMA Plan Review
- Local government adoption

### Create a Safe and Resilient Community

- Implementing the plan to achieve mitigation goals
- Securing funding and assistance



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# Plan Layout

## Base Plan Document (County Level)

- Introduction
- Planning Process
- County Profile
- Hazard Identification and Risk Assessment
- Mitigation Strategy
- Plan Maintenance Process
- Plan Adoption, Implementation and Maintenance

## Jurisdictional Annexes

- Local Planning Team (LPT)
- Community Profile
  - Population Trends
  - Development Trends
- Hazard Identification and Risk Assessment
- Capabilities Assessment
- Mitigation Strategy
- Implementation

### 4 Drafts

1. Administrative HMPC
2. Public review
3. State review
4. FEMA review



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## Role of the Hazard Mitigation Planning Committee



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# Roles and Responsibilities

## Hazard Mitigation Planning Committee

- Coordinate with respective LPTs
- Must attend all HMPC Meetings (1.5 to 2 hours)
- Provide requested Plan Update Guide
- Help prioritize hazards
- Help spread the word about the MJHMP
- Review Draft MJHMP and provide comments
- Identify and partner on mitigation projects
- Assist with and participate in public review process
- Coordinate formal adoption



## Local Planning Teams

- Participate in the planning process
- Assist with updating the plan's content
- Tailor the plan to meet specific needs and issues
- Participation is required for plan approval

## El Dorado County

- Oversee the planning process
- Contract management

## WSP

- Facilitate the planning process
- Project management
- Risk assessment and plan update/development



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# Criteria for Identifying Stakeholders

- Will be affected by the assessment or potential strategies
- Represents typically underrepresented voices
- Owns an asset that the community cares about
- Has the authority to regulate, make policy, or make decisions about an asset
- Has the potential to politically help or hinder the process of implementing strategies
- Has specialized expertise that will help the county with technical questions
- May be able to provide funding or otherwise assist in implementing strategies
- May be able to make critical connections to other relevant topic areas and/or projects that the project team may not be aware of



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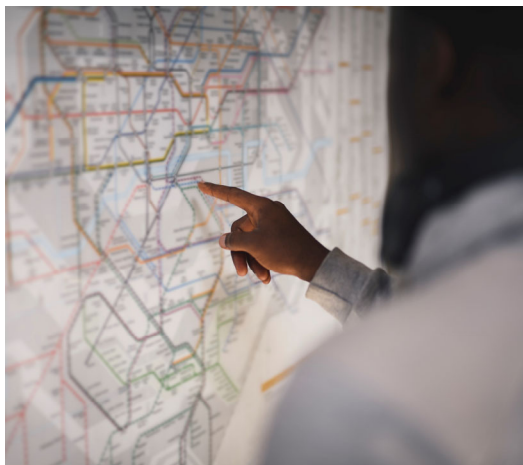


What key stakeholders should be involved in this process?

① Start presenting to display the poll results on this slide.

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## Participation Specifics



### Participating Jurisdictions

- Must attend and participate in planning meetings/workshops
- Provide available data requested of the County and Tribal coordinator and WSP
- Provide input on local mitigation strategy (actions/projects)
- Advertise and assist with public input process
- Review and comment on draft plan
- Coordinate formal adoption



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## Participation Specifics

**Stakeholders (state, federal government, other private, non-profit entity, other interested organizations)**

- Various options/level of participation
  - Attend HMPC meetings
  - Provide data/information
  - Partner on mitigation efforts
  - Review draft plan



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## Review of Identified Hazards



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## Significance of Hazard in 2019 County MJHMP

Hazard	Geographic Extent	Probability of Future Occurrence	Magnitude/Severity	Significance
<b>Avalanche</b>	Limited	Likely	Limited	Low
<b>Dam Failure</b>	Significant	Occasional	Critical	High
<b>Drought</b>	Extensive	Likely	Critical	High
<b>Earthquake</b>	Significant	Occasional	Critical	Medium
<b>Erosion</b>	Limited	Occasional	Limited	Low
<b>Flood</b>	Limited	Occasional-Highly Likely	Limited	Medium
<b>Seiche (Lake Tsunami)</b>	Limited	Unlikely	Limited	High
<b>Severe Weather</b>	Extensive	Highly Likely	Limited	Low
<b>Thunderstorms/Tornadoes</b>	Extensive	Highly Likely	Critical	High
<b>Wildfire</b>	Extensive	Highly Likely	Critical	High



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Which hazards do you think are the highest priority for El Dorado County?

① Start presenting to display the poll results on this slide.

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## Hazard Information Sources

- Local Hazard Mitigation Plans
- 2018 State of California State Hazard Mitigation Plan
- California Climate Action Plan
- State and Local THIRAs, Public Health Risk Assessments
- National Risk Index
- Community Wildfire Protection Plans (CWPPs) and wildfire risk studies
- Historic incidents/incident reports
- Scientific studies
- Other plans and reports (Flood and drainage studies, strategic plans, internet databases)
- Recent disasters
- Public perception

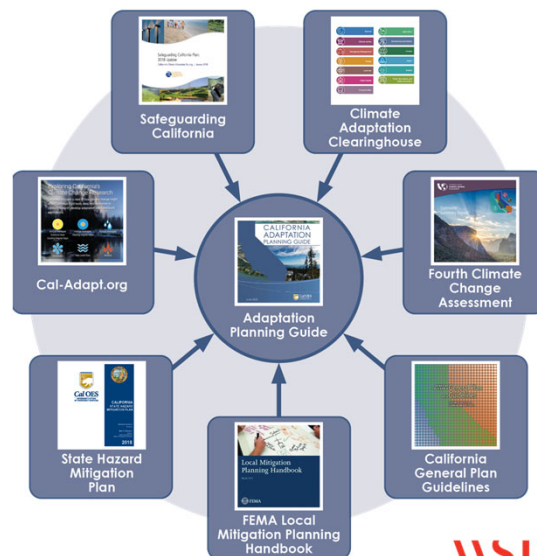


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## Climate Change Considerations

### Risk Assessment

- Addressed under each hazard profile as a factor intensifying impacts
- Discussion covers exposure (what climate change effects will impact the County)
- Risk and Onset (how likely are the impacts and how quickly will they occur)
- Adaptive Capacity (what can be done?)



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# Coordination with Related Planning Efforts & Recent Studies



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## Data Collection: Lay the Groundwork

### Regulatory Requirements

**Resilience Lenses:** Hazard risk reduction and social equity focus on vulnerable populations

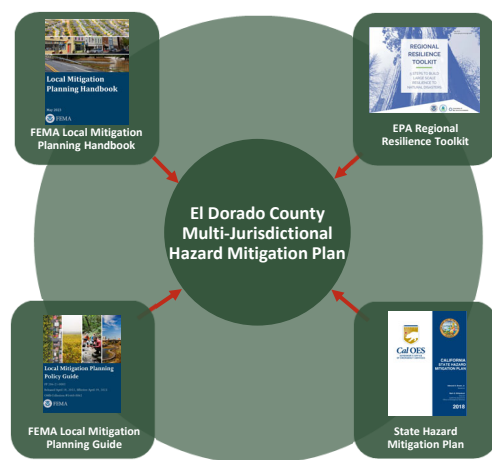
### Plan Guidance

#### Identify and Map Hazards

- What hazards pose the greatest threat to the County's communities?
- What are the past hazard patterns?
- Develop Hazard Problem Statements

#### Climate Stressor Thresholds:

- Identification of potential thresholds for critical climate stressors?
- How will climate change intensify or increase the hazards in the future?



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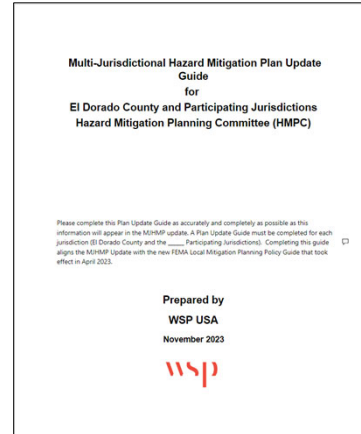
# County, City, and Special District Assets Exposed

## GIS Data Needs List

- Building inventory
  - Statewide parcel and Assessor's database
- Critical Facilities/Assets
  - Local GIS databases and Other state/federal sources
  - Existing HMPs: Review for changes/updates

## Plan Update Guide

- Worksheet #1 – Hazard Identification
- Worksheets #2 – Historic Hazard Event
- Worksheets #3 – Vulnerability Assessment
- Worksheet #4 – Capability Assessment

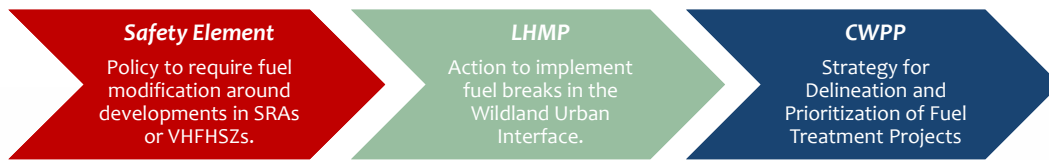
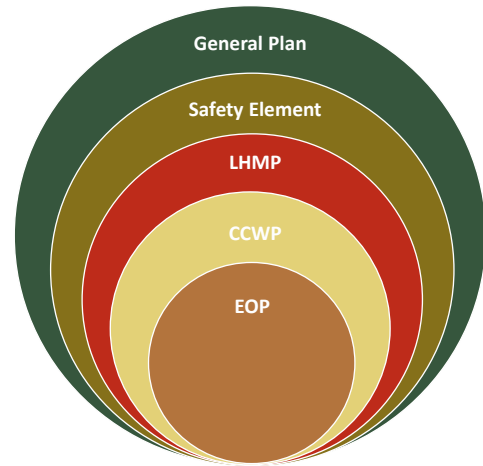


# Planning for Public and Stakeholder Involvement



# Plan Integration

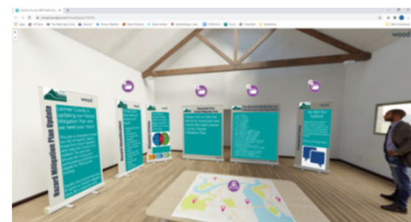
- Housing Element (2021)
- Safety Element (2023)
  - Climate Vulnerability Assessment
- LHMP (2019, 2024 Update in Progress)
- Community Wildfire Protection Plans
  - West Slope CWPP (2022)
  - Tahoe Basin CWPP (Update 2023-2024)
- Emergency Operations Plan (2023)



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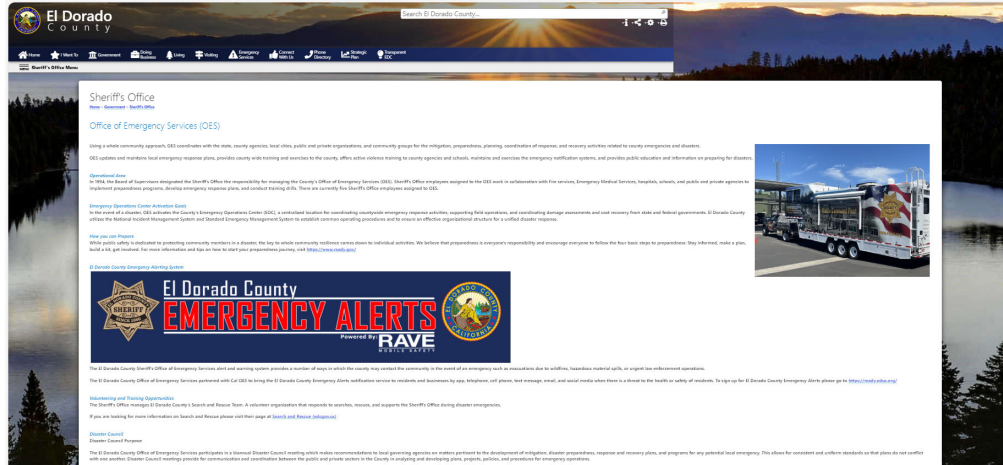
# Planning for Public and Stakeholder Involvement

- Proposed activities
  - County MJHMP [Webpage](#)
  - Online Survey
  - Virtual Public Engagement Room
  - Public Workshops
  - Press Releases & Social Media Posts
  - Draft plan for public review with online feedback form
- Counties and Jurisdictions
  - Discuss MJHMP at County Commissioner, Board of Supervisor, and City Council meetings.
  - Assist with soliciting comments during public review



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# El Dorado County MJHMP Webpage



[https://www.edcgov.us/Government/sheriff/Support/Pages/office\\_of\\_emergency\\_services\\_\(oes\).aspx](https://www.edcgov.us/Government/sheriff/Support/Pages/office_of_emergency_services_(oes).aspx)



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## Information Needs and Next Steps



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## Initial Information Needs/Next Steps

### WSP

- Plan Update Guide will be distributed this week
- Starting GIS data collection
- Development of a Critical Facility Database
- Developing public outreach materials

### El Dorado County and Municipalities

- Complete Plan Update Guide due by **December 27, 2023**.
- Post a Press Release announcing effort to update County's MJHMP
- Attend HMPC Meeting #2 (tentatively scheduled for late December/early January)
- Circulate and Complete Online Survey by **February 1, 2023**.

### Stakeholders

- Provide additional information as applicable – hazards, plans, projects
- Stay in loop via email group from El Dorado County, HMPC, and City LPTs



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# Don't Forget!

## Please Type Your Name, Title, and Affiliation in Chat Box



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# Questions?

**Scott Bare**  
Deputy Sheriff  
El Dorado Sheriff's Office  
bares@edso.org

**Project Manager**  
Juliana Prosperi AICP, LEED AP®, ENV SP  
WSP USA Environment & Infrastructure  
juliana.prosperi@wsp.com

